

REMARKS/ARGUMENTS

Claims 12-22 and 24 are remain in this application. Claims 1-12 and 23 have been cancelled. Claims 24 replaces claim 23.

The dependency of claims 13-16 and 18-21 and the typographical error in claim 21 have been corrected.

Claim 22 was objected to on an asserted ground that it is a substantial duplicate of claim 12. It is submitted that claim 22 is of a different scope from claim 12. Claim 12 is for a breathing gas supply system for supplying breathable gas in an aircraft, and claim 22 is for an aircraft having the claimed breathable gas supply system. It is submitted that these differences are sufficient to support separate claims. In view of the amendments to the claims, withdrawal of the objections is requested.

The allowable claims 17-21 have been amended to correct the dependency and to include the limitations from the claims on which they depend. In view of the amendments, it is believed that claims 17-21 are now in condition for allowance.

The claims also have been amended to clarify that the higher concentration enriched product gas is delivered to one or more breathing gas outlets, and that the less highly enriched product gas is delivered to an aircraft cabin for breathing during normal high altitude flight. This limitation appeared in claim 13 as filed.

Applicant respectfully traverses the rejection of claims 12-14, and 16 under 35 U.S.C. §102(b) as being anticipated by Hamlin patent 4,960,119. Hamlin is directed to an aircraft life support system which is designed for supplying oxygen enriched breathing gas through a mask to an aircrew member in a military aircraft. The gas is supplied from a concentrator and a compressor to maintain a pressure range within a plenum storage tank 30 which is located in the aircraft and to a gas storage bottle 40 which is mounted on an aircrew seat (column 5, line 35). Both the plenum storage tank 30 and the gas storage bottle 40 are connected to a regulator 36 which may be mounted on the aircrew seat (column 5, line 30). The regulator is adapted for connection to a personal equipment connector 58 carried by the aircrew member and

joined by supply lines to a breathing mask and a G protection garment (column 5, line 67 - column 6, line 3). During normal flight, breathing gas is delivered from the plenum storage tank 30 to a mask on the seated aircrew. In the event of an ejection from the aircraft or other emergency, breathing gas is delivered from the gas storage bottle 40 to the aircrew's mask.

Applicants claimed breathing gas supply system is of the type which provides breathing gas to aircraft passengers in an aircraft cabin. Normally breathing gas of a lower oxygen concentration is delivered to the aircraft cabin. In the event of an emergency, more highly enriched breathing gas is provided to one or more outlets. The outlets may be connected to breathing masks which are used only during the emergency. The rejected claims specifically require two modes for providing breathing gas of different concentration. In one mode, a first feed line feeds more highly enriched product gas to one or more gas outlets, and in a second mode a second feed line feeds less highly enriched product gas to an aircraft cabin for breathing during normal high altitude flight. Since Hamlin is designed to supply breathing gas to a mask worn by an aircrew during both normal and emergency operation and there is no suggestion of supplying the breathing gas during normal flight to an aircraft cabin, claims 12-14, and 16 clearly are not anticipated by Hamlin and the rejection should be withdrawn. It should be noted that although the "aircraft cabin" limitation was not present in claim 12 as filed, it was present in claim 13 as filed. Claim 16 further requires that the product gas produced in the second mode of operation is diluted for use with recirculated cabin air prior to introduction into the cabin for normal breathing so that the oxygen concentration of the air breathed normally in the cabin is not significantly greater than that of ambient air. There is no disclosure of diluting the gas in Hamlin. Hamlin does provide a lower oxygen concentration during normal flight, but this is not achieved by controlling the operation of the concentrator, not with dilution using cabin air. In view of the failure of Hamlin to teach the system

of claims 12-14, and 16, it is requested that the rejection under 35 U.S.C. §102(b) be withdrawn.

Applicant respectfully traverses the rejection of claim 15 under 35 U.S.C. §103(a) as being anticipated by the Hamlin patent. For the reasons discussed above, it is submitted that claim 12 is patentable over Hamlin. If claim 12 is patentable over Hamlin, then dependent claim 15 also is patentable and the rejection should be withdrawn.

Claim 24 is submitted as a replacement for claim 23. It is submitted that new claim 24 also is patentable over Hamlin. Claim 24 is directed to a method for supplying breathing gas to occupants of an aircraft cabin during high altitude flight. The method involves providing oxygen enriched gas from an oxygen enriching apparatus with varying concentrations. The concentration is controlled to provide during a first operating mode a more highly enriched product gas and during a second operating mode a less highly enriched product gas. In the first mode, the more highly enriched gas is provided to one or more emergency breathing gas outlets in the cabin, and in the second mode the less highly enriched product gas is provided to the aircraft cabin for breathing by occupants during normal high altitude flight. Since such a method is not suggested in Hamlin, it is submitted that claim 24 also is patentable.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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